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<p>(21) International Application Number: PCT/US92/00420 (22) International Filing Date: 17 January 1992 (17.01.92) (30) Priority data: 661,077 26 February 1991 (26.02.91) US (60) Parent Application or Grant (63) Related by Continuation US 661,077 (CIP) Filed on 26 February 1991 (26.02.91) (71) Applicant (for all designated States except US): MASSACHUSETTS INSTITUTE OF TECHNOLOGY [US/US]; 77 Massachusetts Avenue, Cambridge, MA 02139 (US).</p>	<p>(72) Inventors; and (75) Inventors/Applicants (for US only) : RAVA, Richard, P. [US/US]; 635 Beaver Street, Waltham, MA 02154 (US). BARAGA, Joseph, J. [US/US]; 109 Highland Avenue, Apt. 30, Somerville, MA 02143 (US). FELD, Michael, S. [US/US]; 56 Hinckley Road, Waban, MA 02168 (US). (74) Agents: HOOVER, Thomas, O. et al.; Hamilton, Brook, Smith & Reynolds, Two Militia Drive, Lexington, MA 02173 (US). (81) Designated States: AT (European patent), BE (European patent), CA, CH (European patent), DE (European patent), DK (European patent), ES (European patent), FR (European patent), GB (European patent), GR (European patent), IT (European patent), JP, LU (European patent), MC (European patent), NL (European patent), SE (European patent), US. Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</p>	

(54) Title: SYSTEMS AND METHODS OF MOLECULAR SPECTROSCOPY TO PROVIDE FOR THE DIAGNOSIS OF TISSUE

(57) Abstract

Systems and methods for spectroscopic diagnosis and treatment are employed which utilize molecular spectroscopy to accurately diagnose the condition of tissue. Infrared Raman spectroscopy and infrared attenuated total reflectance measurements are performed utilizing a laser radiation source and a Fourier transform spectrometer. Information acquired and analyzed in accordance with the invention provides accurate details of biochemical composition and pathologic condition.



